

AMENDMENTS TO THE CLAIMS:

11. (Currently amended) A process comprising
mixing organic waste, one or more coal combustion by-products, and one or more alkaline additives to form an organic waste/coal combustion by-products/alkaline additive by-product mixture;
drying said organic waste/coal combustion by-products/alkaline additive by-product mixture with heat, causing ammonia to be liberated from said organic waste; and
introducing said liberated ammonia into a coal burner of a coal burning power plant;
and, reacting scavenged exhaust gases from the power plant with at least one reactive material so as to reduce CO₂ emissions from the power plant and/or to reduce SO₂ and SO₃ emissions from the power plant.
12. (Previously presented) The process of claim 11, wherein the heat for said drying includes waste heat from said coal burning power plant.
13. (Previously presented) The process of claim 11, wherein said drying comprises drying the organic waste/coal combustion by-products/alkaline additive by-product mixture to at least 50% solids.
14. (Previously presented) The process of claim 11, wherein said drying comprises drying the organic waste/coal combustion by-products/alkaline additive by-product mixture to at least 75% solids.
15. (Currently amended) A process comprising
mixing organic waste, one or more coal combustion by-products, and one or more alkaline additives to form an organic waste/coal combustion by-products/alkaline additive by-product mixture;

drying said organic waste/coal combustion by-products/alkaline additive by-product mixture with heat, causing ammonia to be liberated from said organic waste;

introducing said liberated ammonia into a coal burner of a coal burning power plant;
and The process of claim 11, further comprising reacting scavenged exhaust gases from the power plant with at least one reactive material comprising Ca(OH)_2 so as to decrease the amount of pollutant gases in said exhaust gases.

16.-18. (Canceled)

35. (Currently amended) A process comprising
mixing organic waste with one or more coal combustion by-products to form an organic waste-coal combustion by-product mixture;
drying with waste heat from a coal burning power plant the organic waste-coal combustion by-product mixture to at least 50% solids forming a dried organic waste-coal combustion by-product mixture and causing ammonia to be liberated from said organic waste; and
introducing said liberated ammonia into a coal burner of a coal burning power plant.

36. (Previously presented) The process of claim 35, wherein the organic waste-coal combustion by-product mixture has a pH of at least 9.5.

37. (Previously presented) The process of claim 35, wherein said mixing further includes mixing lime with the organic waste and coal combustion by-products.

38. (Previously presented) The process of claim 35, wherein said organic waste comprises waste selected from the group consisting of sewage sludges, animal manures, pulp and paper waste, fermentation waste, food waste, paper and cardboard, other industrial organic waste, and mixtures thereof.

39. (Previously presented) The process of claim 35, wherein said coal combustion by-products comprise at least one by-product selected from the group consisting of fly ash, fluidized bed ash, flue gas desulfurization by-products, lime, calcium hydroxide, calcium carbonate, and mixtures thereof.
40. (Previously presented) The process of claim 35, wherein drying takes place in at least one dryer.
41. (Previously presented) The process of claim 40, wherein said dryer is selected from the group consisting of direct concurrent flow dryers, horizontal single, double and triple pass indirect dryers, and vertical counter flow rotating disk indirect dryers.
42. (Previously presented) The process of claim 35, wherein said drying is conducted using a direct dryer.
43. (Previously presented) The process of claim 35, wherein said drying is conducted using an indirect dryer.
44. (Canceled)
45. (Previously presented) The process of claim 35, wherein said drying comprises drying the organic waste-coal combustion by-product mixture to at least 75% solids.
46. (Previously presented) The process of claim 35, wherein when said coal combustion by-product comprises an alkaline mineral by-product, the drying step produces a further by-product.

47. (Currently amended) A process comprising

mixing organic waste with one or more coal combustion by-products to form an organic waste-coal combustion by-product mixture;

drying with heat the organic waste-coal combustion by-product mixture to at least 50% solids forming a dried organic waste-coal combustion by-product mixture and causing ammonia to be liberated from said organic waste;

introducing said liberated ammonia into a coal burner of a coal burning power plant;
and ~~The process of claim 35, further comprising~~ reacting scavenged exhaust gases from said drying with at least one reactive material to decrease the amount of CO₂, SO₂ and SO₃ in said exhaust gases and thereby decrease emissions from the drying.

48. (Previously presented) The process of claim 47, wherein said reactive material comprises Ca(OH)₂.

49. (Previously presented) The process of claim 35, further comprising mixing the dried organic waste-coal combustion by-product mixture with coal.

50. (Previously presented) The process of claim 49, wherein the coal is pulverized coal.

51. (Previously presented) The process of claim 49, further comprising feeding the mixture formed by mixing the by-product with coal into said coal burner.

52.-61. (Canceled)

64. (Currently amended) A system comprising

a coal burner of a coal burning power plant;

a coal feed supplying coal to said coal burner wherein said coal feed comprises coal and a dried mixture of organic waste and coal combustion by-product and said coal and said

dried mixture of organic waste and coal combustion by-product are mixed and then pulverized; and

an ammonia feed to said coal burner comprising ammonia liberated from organic waste upon drying a mixture of organic waste and one or more coal combustion by-products.

65.-67. (Canceled)

72.-75. (Canceled)

75. (Previously presented) A system comprising

a coal burner of a coal burning power plant;

a coal feed supplying coal and a mixture of organic waste, one or more coal combustion by-products and one or more alkaline additives to said coal burner, wherein said coal and said mixture of organic waste, one or more coal combustion by-products and one or more alkaline additives are mixed and then pulverized; and

an ammonia feed to said coal burner comprising ammonia liberated from organic waste upon mixing organic waste, one or more coal combustion by-products and one or more alkaline additives.

76.-77. (Canceled)

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AMENDMENTS TO THE DRAWINGS:

Attached hereto is a **new** sheet of drawings depicting proposed new Figure 3.